

## **Statewide Summary of Drought Development**

Kentucky is currently experiencing moderate-to-severe drought conditions as a result of a substantial deficit in precipitation that has been accumulating since November 2006. At the present, there are no reports of shortages at water supply intakes. However, in the past 10 days there have been at least 12 reports of high water demands overwhelming the ability of water suppliers to treat, store and distribute potable water to customers. These have occurred in the following counties: Bourbon, Casey, Estill, Garrard, Grant, Harrison, Mercer, Pulaski, Russell, Scott, Shelby and Woodford.

### **Useful Drought Indicators**

#### **PRECIPITATION**

Since the beginning of 2007, rainfall deficits have continued to build across Kentucky, culminating in May with an unusual 12- to 15-day period during which no beneficial rains fell. The month of June has begun with a substantial deficit in place ranging from 6 to 10 inches with more severe deficits located in the southern regions of the West, Central, Bluegrass and East climatic divisions. The accumulated rainfall for the months February through May rank among the top five driest in 113 years of instrumental recording for all four climatic divisions.

Showers and thunderstorms this week and over the upcoming weekend may provide some short-term relief for some areas. However, the amounts and distribution of these storms will not be sufficient to have a significant positive impact on the developing drought.

#### **STREAMFLOWS**

Streamflows have remained in the low- to below-normal range for most of the February through May "spring" season. In the past two weeks, record-low daily flows have been observed at several gauged locations in the Green, Kentucky, Salt and Licking River basins. Current streamflows across Kentucky range from normal to below normal with the lowest flows occurring in parts of the lower Kentucky, lower Licking, upper Salt, Upper Cumberland and Green river basins. In general, flows east of a north-south line running along Interstate 75 are within a normal range for this time of year.

### LAKE ELEVATIONS

Most small water-supply lakes are not heavily impacted at this time. Lakes under the control of the [Huntington District](#), [Louisville District](#) and [Nashville District](#) of the U.S. Army Corps of Engineers continue to operate along their normal lake elevation curves. Two exceptions are the Barren River reservoir in Barren County and Rough River reservoir in Breckenridge County. Barren River reservoir is having difficulty bringing the elevation to normal pool and is currently 7.7 feet down. Discharges from the dam have been at or near the minimum release since March 20, 2007. Similarly, Rough River reservoir is nearly 2 feet below normal pool and has been at or near to minimum release since March 16, 2007. Releases from Corps of Engineer reservoirs are important to the status of many Kentucky rivers as sources of supply for drinking water, assimilation of wastewater discharges, water quality and aquatic habitat. These rivers include the Green, Barren, Rough, Nolin, Kentucky, Salt, Licking and Big Sandy rivers.